

REMARKS

Claims 1, 5, 8, 15, 19, 26, 30, 37, 45, 49 are amended, claims 42-44 are canceled, and no claims are added; as a result, claims 1-41, and 45-54 are now pending in this application.

§102 Rejection of the Claims

Claims 1-4, 8-18, 26-29, and 42-44 were rejected under 35 USC § 102(b) as being anticipated by Cowles (U.S. Patent No. 5,940,315). Applicant respectfully traverses the rejection.

The rejection states that, Cowles discloses “a strapping line 112 of lower resistance that the wordlines couple to a single wordline wherein the strapping line bypasses a portion in a middle region between a first and a second end of the single wordline.”

Cowles appears to show multiple memory arrays 20, 21, etc. Each array in Cowles appears to include wordlines. Cowles also appears to show straps 110, 111, etc. that bypass entire wordlines in selected arrays. However, Cowles does not show a strapping line of lower resistance than the wordlines coupled to a single wordline in a single array wherein the strapping line bypasses only a portion in a middle region between a first and second end of the single wordline, and wherein the strapping line is spaced apart from adjacent conductive structures by a distance greater than a wordline pitch.

In contrast, claims 1, 8, 15, 26, and 37 as amended include a strapping line of lower resistance than the wordlines coupled to a single wordline in a single array wherein the strapping line bypasses only a portion in a middle region between a first and second end of the single wordline, and wherein the strapping line is spaced apart from adjacent conductive structures by a distance greater than a wordline pitch. Selected distinguishing features of the claims over Cowles are discussed above. Other distinguishing features also exist, and Applicant respectfully reserves the right to argue them at a later date.

Because the Cowles reference does not show every element of Applicant's independent claims, a 35 USC § 102(b) rejection is not supported. Reconsideration and withdrawal of the rejection are respectfully requested with respect to Applicant's independent claims 1, 8, 15, 26, and 37. Additionally, reconsideration and withdrawal of the rejection are respectfully requested

with respect to the remaining claims that depend therefrom as depending on allowable base claims.

Claims 5-7, 19-25, 30-41, and 45-54 were rejected under 35 USC § 102(b) as being anticipated by Sukegawa et al. (U.S. Patent No. 5,841,688). Applicant respectfully traverses the rejection.

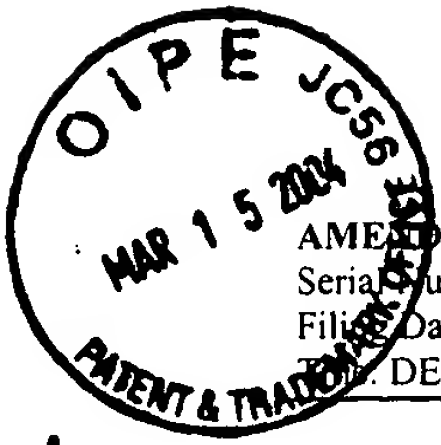
The rejection states that, Sukegawa discloses a plurality of separate strapping lines (500, 508, 502, . . .) of lower resistance than the wordlines coupled to at least one of separate portions (536, 538, 540, . . .) of a single wordline.

Sukegawa appears to show a number of electrically separate wordline portions 536, 538, 540, etc. Sukegawa also appears to show a single wordline strap that is made up of a number of electrically connected segments 500, 508, 502, etc.. The single composite wordline strap of Sukegawa appears to be coupled through a single channel 528, 530, 532, etc. to separate wordline portions 536, 538, 540 etc.. Sukegawa does not show a plurality of **separate strapping lines** of lower resistance than the wordlines coupled to at least one of the number of wordlines in a single array wherein the strapping lines bypass a plurality of separate portions of a single wordline. Further, Sukegawa does not show a number of strapping devices which bypass only portions of the wordlines in the single array of parallel wordlines, wherein at least one portion of a wordline is in a middle region between a first and second end of the wordline. Further, Sukegawa does not show attaching a strapping line of lower resistance than the wordlines to a single wordline wherein the strapping line bypasses only a portion in a middle region between a first and second end of the single wordline.

In contrast, claims 5 and 19 as amended include a plurality of separate strapping lines of lower resistance than the wordlines coupled to at least one of the number of wordlines in a single array wherein the strapping lines bypass a plurality of separate portions of a single wordline. Further, claim 30 as amended includes a number of strapping devices which bypass only portions of the wordlines in the single array of parallel wordlines, wherein at least one portion of a wordline is in a middle region between a first and second end of the wordline. Further, claim 37 as amended includes connecting individual strapping devices to portions in a middle region between a first and second end of single wordlines using at least two channels for each strapping

device. Further, claims 45 and 49 as amended include attaching a strapping line of lower resistance than the wordlines to a single wordline wherein the strapping line bypasses only a portion in a middle region between a first and second end of the single wordline. Selected distinguishing features of the claims over Sukegawa are discussed above. Other distinguishing features also exist, and Applicant respectfully reserves the right to argue them at a later date.

Because the Sukegawa reference does not show every element of Applicant's independent claims, a 35 USC § 102(b) rejection is not supported. Reconsideration and withdrawal of the rejection are respectfully requested with respect to Applicant's independent claims 5, 19, 30, 37, 45, and 49. Additionally, reconsideration and withdrawal of the rejection are respectfully requested with respect to the remaining claims that depend therefrom as depending on allowable base claims.



AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/808750

Filing Date: March 15, 2001

INVENTOR: DEVICE AND METHOD TO REDUCE WORDLINE RC TIME CONSTANT IN SEMICONDUCTOR MEMORY DEVICES

Page 18

Dkt: 303.723US1

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6944 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

HUY T. VO

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(612) 373-6944

Date

3-10-04

By

David C. Peterson

Reg. No. 47,857

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 10 day of March, 2004.

Tina Kohut

Name

Z'Uf

Signature